

Disease Prevention Through Immunization: The Beginning of Health Care Reform

During the last two decades, we have been part of a "new world order" in the prevention of disease through immunization. With the widespread use of vaccines against childhood diseases, the incidence of diphtheria, tetanus, pertussis, polio, measles, mumps, and rubella has dropped 90 percent or more from the days when these infectious diseases killed a significant number of the nation's young. Currently, there are about 25 major human diseases caused by viruses or bacteria that can be prevented or controlled by vaccines. In addition, vaccine technology has advanced in the last 20 years so that there are new potential disease targets for prevention through immunization.

With the exception of safe water, no measure in public health can compare with the effectiveness of vaccines. Today, approximately 98 percent of our children are fully immunized against five childhood diseases by the time they begin school. These high immunization levels are due to the combined efforts of State and local health departments, education officials, a variety of public and private sector health care providers, and the Federal Government. That is the good news.

The bad news is that despite the proven benefits of vaccines against childhood diseases, children in this country are suffering and needlessly dying from these diseases. The 1989-91 measles epidemic was a tragic way to learn that getting children immunized to enter school is not enough. Our youngest children are vulnerable to potentially crippling epidemics because we are not reaching them at the appropriate times—starting at birth and four times during the first 2 years of life. The reason for this is multifaceted. There have been reductions in resources for immunizations; inadequate insurance coverage has contributed to patient shifting from private providers to public sector clinics; clinics are often under staffed, overworked, and closed during convenient hours.

In some instances, well-intended efforts have, in practice, resulted in obstacles that make it more difficult for parents to have their children immu-

nized. For example, in a 1990 survey, officials in about half of the country's public immunization programs reported to the Centers for Disease Control and Prevention (CDC) that they required advance appointments instead of immunizing on request. Many clinics required physical examinations, physician referral, or enrollment in comprehensive care, well-baby clinics before immunization. These services may need scheduling weeks in advance. In short, the clinics were not "user friendly."

The Public Health Service has taken a number of steps to break down these barriers. Five articles in this issue of *Public Health Reports* speak to this effort. The first article provides a discussion of President Clinton's Comprehensive Child Immunization Initiative to improve the delivery of childhood immunizations. The focus of the initiative is to improve access to immunization services, eliminate financial barriers to age appropriate immunization, and to facilitate the development of a national immunization tracking system.

Two articles describe the success of special immunization efforts. Michael Davidson, of CDC's National Center for Infectious Diseases, provides information on high rates of pneumococcal vaccination achieved in a remote high-risk Alaska native population. Paul Stehr-Green, of CDC's National Center for Prevention Services, describes an evaluation of computer-generated telephoned reminders to improve immunization levels in inner-city clinics. Other articles deal with the evaluation of a two-dose measles-mumps-rubella vaccination schedule among college athletes and a rubella outbreak among the Amish of northeastern Ohio.

Timely immunization of all children in the United States must be accepted as a national obligation, because the consequences of failure—preventable illness leading to unnecessary costs, disability and death—are shared by the entire nation. America cannot afford such waste.

The Congress recognized the importance of immunization to our primary health care system and the potential development of new vaccines in the enactment of Title XXI of the Public Health

Service Act (Section 2103), which mandates the preparation of a National Vaccine Plan. This plan is to set vaccine priorities and indicate how they are to be carried out. These priorities include research and development, testing, licensing, production, procurement, distribution, and the safe and effective use of vaccines.

It was the intent of the Congress that the National Vaccine Plan serve as a blueprint for improvement in the nation's immunization system. The plan was used as the basis for President Clinton's Comprehensive Child Immunization Initiative. Speaking before a joint committee of Congress, Health and Human Services Secretary Donna E. Shalala stated that "this initiative embodies the President's commitment to ensure proper immunization for all American children. It is a sound and cost effective investment in America's future health and productivity. And it is an essential first step towards a national health care reform plan that will emphasize prevention and guarantee the security of health care coverage."

The activities in the National Vaccine Plan expand across all sectors of society, including the Federal Government, State and local governments, academic institutions, voluntary organizations, the pharmaceutical industry, the medical community, social and welfare services, schools, and parents. It also recognizes the key role of personal responsibility in our efforts to improve immunization status. The plan recognizes, however, that governmental health agencies (both Federal and State) have a unique function to ensure that our immunization missions are clearly defined and that vital elements to achieve the goals of the plan are in place. Within this framework, the National Vaccine Plan addresses five broad goals for improving the Nation's immunization system. These goals include:

- Better educate the public and members of the health professions on the benefits and risks of immunizations;
- Better use of existing vaccines to prevent disease, disability, and death;
- Develop new and improved vaccines;
- Ensure the optimal safety and effectiveness of vaccines and immunization; and

- Support global disease eradication and prevention through immunization.

Achieving these goals is one of the principal objectives of the Department. This effort will require the commitment of all of us if we are to achieve the national goal of 90 percent coverage of 2 year olds by the year 2000. These initiatives offer the opportunity to achieve the unprecedented promise of improved disease prevention through the use of vaccines.

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Special Note to Readers

President Clinton's proposed Comprehensive Child Immunization Initiative has sparked considerable public and congressional debate. At the time of publication, the legislative portion of the Initiative had been acted on by the House of Representatives on May 27, 1993, and by the Senate on June 25, 1993. A House-Senate conference committee was to be convened to reconcile the differences in the two bills.

We will report on the final outcome of the Immunization Initiative in a future issue.